



September 2002

NJ School Technology Survey 2002 Report

Since its inception in 1993, the New Jersey School Technology Survey has provided details that have supported a picture of technological growth across the state. Our schools have made impressive progress in implementing educational technology to enhance student achievement. In the 1993-94 school year, the student-to-computer ratio statewide was 15:1. The ensuing years have shown tremendous growth in supporting access to educational technology in learning environments. The current student to multimedia computer ratio is 4.4 to 1.

The survey details the connectivity and current infrastructure across the state and recognizes the parallel need to have teachers skilled in the process of infusing technology into the curriculum. With professional development opportunities supported by the creation of the county-based Educational Technology Training Centers (1997), as well as the inclusion of professional development in grants, teachers have taken advantage of more than 125,000 workshops offering opportunities to learn more about technology and its infusion into the curriculum. The current survey data shows more than 75% of New Jersey's teachers as having skill levels of intermediate or higher in the use of technology in instruction.

The New Jersey Department of Education continues to provide initiatives (See page 8) to help school districts achieve the vision that *all students, no matter which district or school they attend, will be able to achieve the Core Curriculum Content Standards because they will have unlimited access to people, to a vast array of curriculum and instruction, and to information and ideas -- no matter where they exist. (For Vision and Benchmarks see* <http://www.state.nj.us/njded/techno/edtechvision.htm>)

Photo courtesy of Salem School District



By the Numbers

- 90%** Survey response rate for the School Technology Survey 2002
- 92.7%** Districts with technology coordinators
- 89.7%** Classrooms with Internet connectivity
- 94.7%** Schools with Web sites
- 93.8%** Schools that are using Internet filtering/monitoring software
- 81%** Teachers with technology skills at intermediate, advanced or instructor levels

AND...

- 4.4 to 1** Student to multimedia computer ratio



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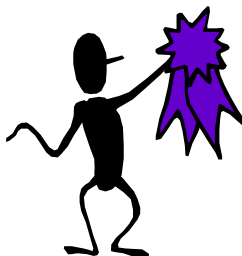
Computer Ratio	2
Internet Access	3
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GOAL

New Jersey school districts will establish and maintain the technology infrastructure necessary for students and educators to access electronic information and to communicate freely via technology.

80% of schools address the effective use of technology for student achievement when supervising and evaluating educators

Percent of Classrooms with Internet Connections				
	1999	2000	2001	2002
State Total	NA	71.9%	84.0%	89.7%
Counties:				
Atlantic	NA	82.8%	95.4%	96.3%
Bergen	NA	69.7%	79.9%	88.7%
Burlington	NA	94.2%	95.7%	94.2%
Camden	NA	87.5%	98.1%	97.0%
Cape May	NA	86.0%	91.9%	93.7%
Cumberland	NA	86.5%	96.2%	98.2%
Essex	NA	43.3%	71.1%	76.2%
Gloucester	NA	83.6%	89.2%	97.5%
Hudson	NA	78.7%	85.8%	91.8%
Hunterdon	NA	94.0%	95.4%	96.5%
Mercer	NA	84.2%	88.4%	88.4%
Middlesex	NA	57.0%	57.8%	78.9%
Monmouth	NA	71.6%	87.2%	94.0%
Morris	NA	67.5%	88.1%	94.2%
Ocean	NA	60.0%	82.1%	87.5%
Passaic	NA	51.4%	83.0%	85.7%
Salem	NA	85.1%	98.1%	97.1%
Somerset	NA	82.3%	88.1%	93.7%
Sussex	NA	71.9%	95.3%	96.2%
Union	NA	73.5%	82.1%	85.3%
Warren	NA	93.9%	93.6%	96.0%
Regions:				
North	NA	63.8%	81.8%	87.4%
Central	NA	70.1%	79.7%	87.9%
South	NA	87.3%	95.1%	96.2%
Districts:				
Abbotts	NA	68.2%	82.8%	86.2%
Non-Abbotts	NA	72.8%	84.3%	90.6%



Student to Multimedia Computer Ratio				
	1999	2000	2001	2002
State Total	7.2 to 1	5.3 to 1	4.5 to 1	4.4 to 1
Counties:				
Atlantic	8.3 to 1	4.7 to 1	4.5 to 1	3.8 to 1
Bergen	6.3 to 1	5.1 to 1	4.2 to 1	4.1 to 1
Burlington	6.8 to 1	4.4 to 1	3.9 to 1	4.0 to 1
Camden	5.5 to 1	5.4 to 1	4.1 to 1	3.9 to 1
Cape May	7.5 to 1	4.2 to 1	3.8 to 1	3.6 to 1
Cumberland	6.2 to 1	3.8 to 1	3.3 to 1	3.4 to 1
Essex	7.8 to 1	6.3 to 1	5.5 to 1	4.7 to 1
Gloucester	6.7 to 1	5.0 to 1	3.9 to 1	3.9 to 1
Hudson	7.0 to 1	5.3 to 1	4.9 to 1	4.7 to 1
Hunterdon	6.8 to 1	4.0 to 1	3.3 to 1	3.7 to 1
Mercer	6.3 to 1	4.8 to 1	4.2 to 1	4.4 to 1
Middlesex	10.2 to 1	6.3 to 1	5.5 to 1	5.5 to 1
Monmouth	7.5 to 1	5.4 to 1	4.5 to 1	4.4 to 1
Morris	6.1 to 1	5.7 to 1	4.3 to 1	4.4 to 1
Ocean	8.4 to 1	6.6 to 1	5.1 to 1	5.7 to 1
Passaic	9.3 to 1	6.7 to 1	5.5 to 1	5.3 to 1
Salem	7.1 to 1	4.6 to 1	3.4 to 1	3.2 to 1
Somerset	7.3 to 1	4.8 to 1	3.5 to 1	4.6 to 1
Sussex	7.7 to 1	6.2 to 1	4.9 to 1	4.6 to 1
Union	6.7 to 1	5.0 to 1	4.3 to 1	4.4 to 1
Warren	6.4 to 1	4.6 to 1	4.3 to 1	4.4 to 1
Regions:				
North	7.1 to 1	5.7 to 1	4.8 to 1	4.6 to 1
Central	7.7 to 1	5.4 to 1	4.5 to 1	4.8 to 1
South	6.6 to 1	4.7 to 1	3.9 to 1	3.8 to 1
Districts:				
*Abbotts	6.8 to 1	5.0 to 1	4.6 to 1	4.2 to 1
Non-Abbotts	7.3 to 1	5.4 to 1	4.4 to 1	4.5 to 1

*The Abbott School Districts are 30 special needs districts located in economically disadvantaged areas.

Change in parameters for multimedia computers in 2002!

In 2002, both the technology survey and report card standards consider Pentiums and above or Power Macs and equivalents as multimedia-capable computers. Last year's survey identified multimedia-capable computers as having a baseline of 486 and above or Mac 40 series (68040).

GOAL

Students will attain the educational technology and information literacy skills that will assist them in achieving the Core Curriculum Content Standards and to succeed in the workplace of the 21st century.

Photo courtesy of Howell Public Schools



Average Number of Classrooms with Internet Access

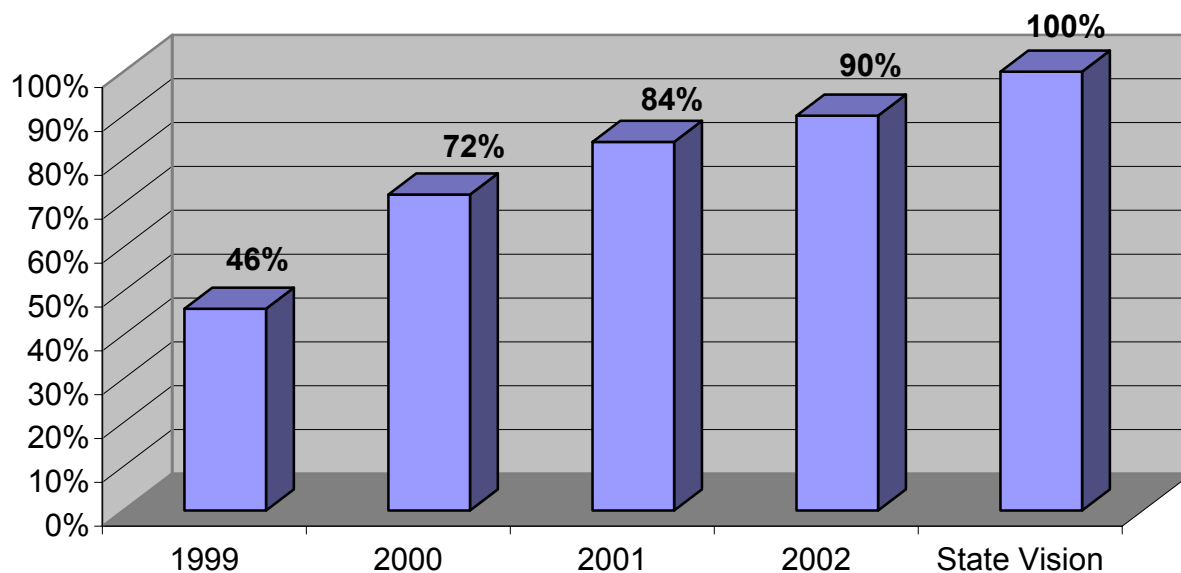
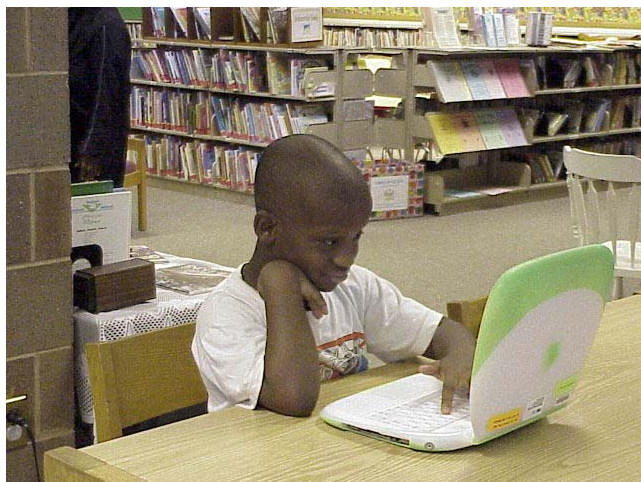


Photo courtesy of Vineland School District



Acceptable Use Policy (AUP)

97% of Schools have an AUP for Students

79% of Schools have an AUP for Teachers/
Administrators

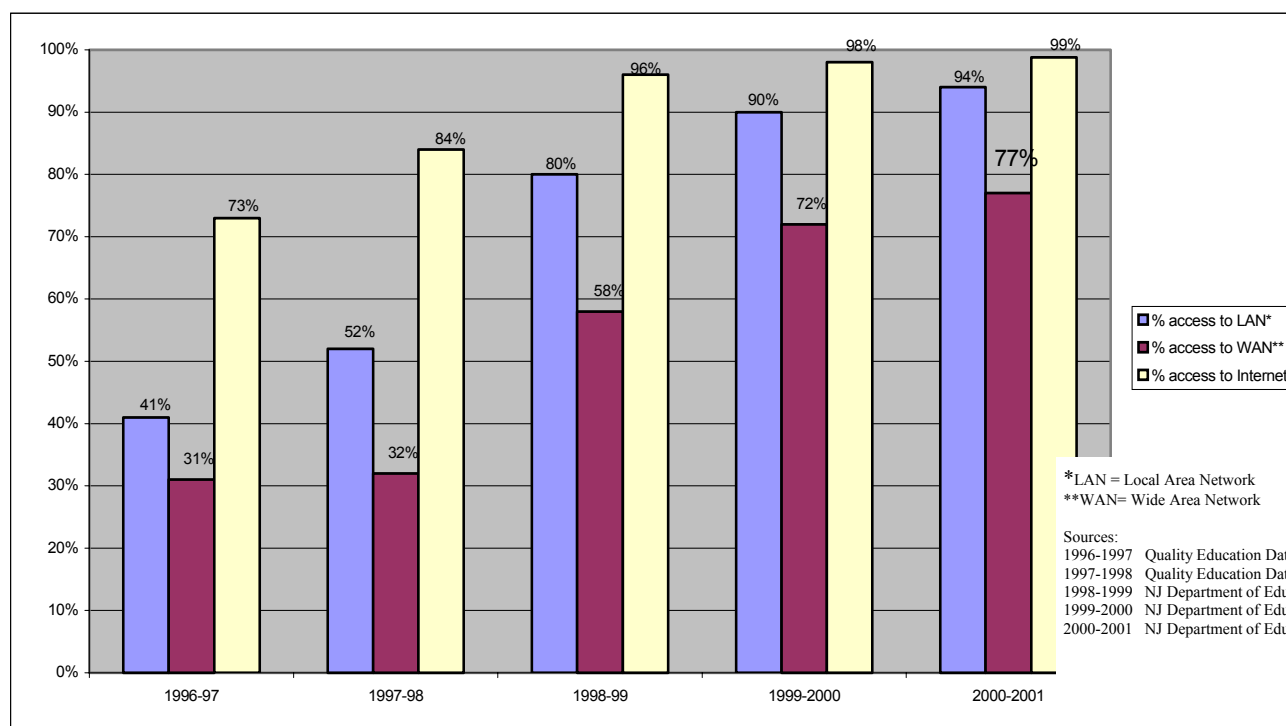
Photo courtesy of Vineland School District



GOAL

Educators will attain the skills and knowledge necessary to effectively use educational technology to assist students to achieve the Core Curriculum Content Standards.

Public Schools with LAN/WAN/Internet Access



Supporting Roles for Technology Implementation in 2002

- * Public school districts with a Technology Coordinator – 93%
- * Public schools with a person responsible for leading and supporting teachers in the integration of technology into the curricula – 88%
- * Public schools with a Technology Coordinator – 59%

PAIRING AND SHARING

Sharing innovative instructional projects using distance learning is the goal of the pairing and sharing grants. These projects are not only learning experiences for teachers and students, but they become models for other schools across New Jersey. Working collaboratively with their partners has brought success and excitement to their process.

At the Judd Elementary School (New Brunswick) and the Wilentz School (Perth Amboy), students having researched colonial times were enacting a skit set in colonial times involving cross-curricular activities for both sites!

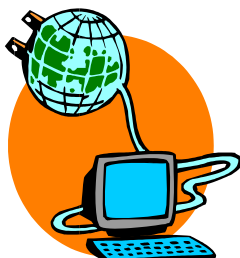
In the Pitman and Quinton Public Schools, research led to enacting a mock trial for *To Kill A Mockingbird* involving both sites. Distance learning presented no boundaries when it came to finding guilt or innocence.

At the Sparta and Haledon Schools, students worked to conquer *The Final Frontier* where deaf students and Spanish researchers worked together to determine the feasibility of an under-the sea-settlement.

Sharing aerospace science had West New York and Kearney schools flying high with *Aerofest 2002* where students investigated and learned properties involved in flight. Their partnership involving video production students produced several videos of famous aviators.

Students are involved and motivated as they learn, partnerships solidify and models develop for schools across the state... that's Pairing and Sharing!

Percentage of Students in Schools Using Technology Tools in Curriculum and in Learning Activities on a Daily Basis			
	0—30%	31—80%	Over 80%
State Total	19.2%	59.4%	20.3%
Counties:			
Atlantic	25.0%	61.3%	12.5%
Bergen	14.5%	58.4%	25.6%
Burlington	23.4%	54.7%	20.3%
Camden	25.0%	47.1%	26.5%
Cape May	37.5%	34.4%	25.0%
Cumberland	17.6%	78.4%	2.0%
Essex	9.9%	66.7%	23.4%
Gloucester	22.8%	44.3%	32.9%
Hudson	14.5%	58.1%	27.4%
Hunterdon	22.2%	64.4%	8.9%
Mercer	21.1%	68.4%	10.5%
Middlesex	12.7%	75.9%	10.2%
Monmouth	17.6%	52.0%	29.1%
Morris	26.4%	56.9%	15.3%
Ocean	34.3%	41.7%	22.2%
Passaic	24.0%	65.6%	8.8%
Salem	22.9%	62.9%	14.3%
Somerset	12.3%	65.8%	21.9%
Sussex	32.6%	48.8%	18.6%
Union	11.3%	63.3%	25.3%
Warren	15.6%	62.5%	18.8%



Percent of Schools with Distance Learning Capabilities				
	1999	2000	2001	2002
State Total	42.0%	67.7%	76.8%	84.1%
Counties:				
Atlantic	51.5%	67.1%	64.8%	76.3%
Bergen	36.3%	72.2%	79.4%	84.4%
Burlington	47.2%	70.6%	76.1%	74.2%
Camden	50.5%	69.1%	75.6%	83.1%
Cape May	92.9%	78.8%	92.9%	93.8%
Cumberland	48.6%	43.5%	74.5%	90.2%
Essex	29.9%	65.3%	78.8%	93.7%
Gloucester	41.4%	73.0%	78.7%	93.7%
Hudson	48.5%	65.7%	84.3%	87.2%
Hunterdon	34.1%	75.6%	82.5%	91.1%
Mercer	45.0%	72.5%	64.0%	58.9%
Middlesex	34.0%	58.9%	68.1%	74.7%
Monmouth	41.6%	71.3%	80.0%	87.8%
Morris	35.2%	63.8%	83.6%	93.1%
Ocean	57.9%	78.4%	76.3%	75.0%
Passaic	32.6%	45.5%	71.1%	76.0%
Salem	53.6%	77.8%	73.5%	91.4%
Somerset	48.3%	72.2%	67.1%	82.2%
Sussex	55.3%	70.0%	75.7%	90.7%
Union	34.8%	74.8%	81.8%	92.0%
Warren	47.1%	65.7%	92.1%	96.9%
Regions:				
North	35.7%	64.8%	80.0%	87.8%
Central	39.7%	70.5%	74.8%	80.3%
South	48.4%	68.6%	75.3%	83.4%
Districts:				
Abbotts	43.7%	69.4%	76.6%	85.6%
Non-Abbotts	39.4%	59.9%	76.8%	83.8%

Photo courtesy of Howell School District



**Percent of Schools with Students Using the
World Wide Web on a Regular Basis**

	0-30% of all Students				31-80% of all Students				Over 80% of all Students			
	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
State Total	67.0%	50.6%	37.3%	31.0%	28.7%	38.2%	47.7%	52.8%	4.3%	10.4%	14.0%	15.7%
Counties:												
Atlantic	61.8%	55.3%	45.1%	40.0%	35.3%	32.9%	40.8%	50.0%	2.9%	11.8%	12.7%	10.0%
Bergen	68.4%	49.3%	27.6%	25.6%	28.7%	40.8%	52.2%	52.3%	2.9%	9.0%	18.4%	22.1%
Burlington	54.5%	49.5%	36.4%	32.0%	42.9%	34.9%	53.4%	52.3%	2.7%	15.6%	10.2%	15.6%
Camden	56.1%	42.6%	32.8%	33.1%	37.4%	41.2%	57.3%	47.8%	6.5%	15.4%	9.2%	18.4%
Cape May	57.1%	51.5%	39.3%	43.8%	39.3%	39.4%	50.0%	43.8%	3.6%	9.1%	10.7%	9.4%
Cumberland	83.8%	41.3%	58.8%	68.6%	16.2%	56.5%	37.3%	29.4%	0.0%	2.2%	3.9%	2.0%
Essex	76.1%	60.1%	39.4%	26.6%	22.2%	34.2%	51.7%	59.9%	1.7%	4.7%	7.9%	12.2%
Gloucester	53.5%	41.9%	33.3%	25.3%	32.4%	50.0%	50.7%	45.6%	14.1%	8.1%	16.0%	29.1%
Hudson	55.8%	43.1%	32.4%	21.4%	34.6%	34.3%	47.2%	58.1%	9.6%	22.5%	17.6%	20.5%
Hunterdon	59.0%	31.1%	27.5%	35.6%	38.5%	55.6%	52.5%	48.9%	2.6%	13.3%	20.0%	13.3%
Mercer	58.3%	64.7%	44.2%	38.9%	36.7%	23.5%	32.6%	45.3%	5.0%	9.8%	23.3%	15.8%
Middlesex	80.0%	67.1%	43.1%	24.7%	18.6%	23.4%	44.4%	66.3%	1.4%	8.9%	8.8%	9.0%
Monmouth	72.6%	50.7%	35.2%	29.7%	23.1%	40.4%	35.9%	45.9%	4.3%	7.4%	28.3%	23.0%
Morris	69.1%	47.8%	44.3%	37.5%	27.3%	47.1%	43.6%	50.0%	3.6%	4.3%	12.1%	12.5%
Ocean	71.8%	47.7%	33.0%	41.7%	24.4%	39.8%	50.5%	45.4%	3.8%	12.5%	14.4%	13.0%
Passaic	79.2%	67.3%	50.4%	38.4%	18.8%	24.8%	43.0%	52.8%	2.1%	5.9%	6.6%	8.8%
Salem	60.7%	47.2%	32.4%	28.6%	32.1%	44.4%	58.8%	57.1%	7.1%	5.6%	8.8%	11.4%
Somerset	61.7%	45.8%	41.4%	19.2%	36.7%	37.5%	47.1%	61.6%	1.7%	15.3%	11.4%	19.2%
Sussex	56.4%	50.0%	32.4%	44.2%	38.5%	35.0%	45.9%	46.5%	5.1%	10.0%	21.6%	9.3%
Union	72.0%	43.3%	32.9%	22.7%	20.3%	41.7%	49.7%	58.0%	7.6%	14.2%	16.8%	18.0%
Warren	55.9%	22.9%	18.4%	12.5%	35.3%	57.1%	68.4%	71.9%	8.8%	20.0%	13.2%	15.6%
Regions:												
North	67.3%	51.9%	37.0%	29.3%	26.7%	38.0%	49.8%	54.9%	3.9%	9.0%	13.2%	15.5%
Central	69.9%	52.0%	37.8%	29.4%	25.0%	36.0%	44.6%	54.0%	3.8%	11.1%	17.6%	16.0%
South	57.9%	46.7%	38.5%	36.4%	35.2%	41.4%	51.0%	47.5%	5.5%	11.6%	10.4%	15.5%
Districts:												
*Abbott	71.2%	47.8%	38.1%	33.7%	23.8%	40.9%	49.5%	49.9%	3.2%	10.2%	12.3%	15.9%
Non-Abbott	64.5%	51.2%	37.5%	30.3%	29.4%	37.6%	47.9%	53.5%	4.5%	10.4%	14.6%	15.6%

Schools/Districts with Web Site

94.7 % of districts have a Web site
83.7 % of schools have a Web site

Percent of Teachers per School at Each Skill Level in the Use of Technology in Instruction																
	Beginner				Intermediate				Advanced				Instructor			
	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
State Total	35.5%	30.4%	26.1%	21.5%	41.1%	46.2%	48.6%	49.9%	18.4%	20.4%	21.5%	24.0%	5.9%	6.4%	6.8%	7.1%
Counties:																
Atlantic	36.9%	32.3%	28.1%	24.1%	40.5%	46.6%	49.1%	50.8%	19.3%	18.7%	20.4%	21.5%	5.7%	5.8%	7.2%	6.8%
Bergen	29.9%	26.3%	21.8%	19.3%	43.0%	48.8%	51.4%	52.6%	21.6%	23.0%	22.4%	24.8%	6.2%	6.7%	6.5%	7.4%
Burlington	32.8%	27.1%	20.8%	21.8%	40.7%	47.7%	53.5%	53.5%	18.2%	21.4%	20.5%	20.1%	8.0%	6.1%	6.1%	5.6%
Camden	30.1%	27.7%	25.3%	20.1%	46.1%	50.1%	49.9%	55.1%	17.5%	21.1%	20.0%	20.1%	5.5%	5.3%	6.5%	6.7%
Cape May	34.8%	22.9%	20.0%	16.7%	43.6%	52.9%	52.2%	51.3%	18.9%	20.2%	23.2%	27.8%	4.9%	6.6%	6.3%	6.6%
Cumberland	37.7%	32.8%	25.4%	29.4%	40.6%	47.0%	77.3%	42.2%	16.6%	15.4%	20.8%	22.0%	5.3%	6.3%	5.7%	8.2%
Essex	43.4%	39.7%	34.5%	28.3%	36.4%	40.5%	43.1%	47.7%	17.2%	17.2%	17.8%	19.5%	5.4%	6.3%	7.4%	6.4%
Gloucester	24.3%	22.1%	16.5%	12.3%	47.6%	49.0%	51.1%	53.9%	23.7%	23.4%	26.9%	27.5%	7.4%	7.3%	7.6%	8.1%
Hudson	40.9%	35.9%	32.6%	30.3%	39.1%	44.1%	47.6%	45.7%	16.3%	18.0%	15.7%	19.9%	4.7%	5.6%	6.6%	6.8%
Hunterdon	26.6%	28.6%	19.2%	15.0%	43.7%	48.0%	45.6%	50.2%	25.0%	19.8%	25.8%	28.2%	7.7%	8.8%	7.4%	8.1%
Mercer	32.5%	35.1%	24.0%	20.3%	38.9%	43.2%	49.0%	51.4%	18.9%	20.4%	22.2%	25.2%	7.4%	6.2%	7.6%	7.2%
Middlesex	46.1%	38.4%	31.1%	18.6%	36.8%	40.9%	46.9%	51.5%	14.1%	18.1%	18.7%	24.2%	4.8%	5.0%	5.5%	7.1%
Monmouth	32.6%	21.5%	21.9%	16.8%	48.2%	49.5%	50.5%	52.1%	17.2%	24.1%	22.2%	25.7%	5.2%	6.9%	7.4%	9.2%
Morris	27.3%	31.6%	26.0%	17.5%	45.9%	43.7%	44.6%	49.6%	20.4%	21.0%	24.7%	26.9%	6.7%	7.3%	6.8%	6.6%
Ocean	39.0%	26.2%	27.5%	25.9%	35.5%	49.0%	50.1%	48.8%	16.1%	20.5%	17.0%	20.4%	5.4%	6.5%	6.4%	5.8%
Passaic	57.7%	46.3%	36.3%	27.6%	31.2%	42.2%	40.2%	47.2%	10.8%	13.3%	19.8%	21.7%	3.3%	4.5%	6.3%	7.0%
Salem	30.4%	26.2%	15.4%	11.7%	45.3%	52.9%	47.5%	51.4%	23.7%	21.7%	30.2%	31.7%	5.0%	6.7%	10.1%	7.7%
Somerset	23.6%	23.9%	18.7%	20.1%	46.7%	48.2%	50.8%	49.1%	22.1%	23.6%	25.8%	23.9%	7.5%	6.6%	7.5%	8.2%
Sussex	27.3%	26.8%	19.3%	15.9%	38.0%	48.1%	51.7%	44.6%	20.0%	19.0%	22.8%	33.6%	7.6%	7.1%	6.8%	7.7%
Union	33.1%	26.1%	27.5%	21.9%	38.2%	44.5%	42.8%	44.0%	22.0%	23.9%	25.4%	31.0%	6.0%	8.3%	7.1%	7.7%
Warren	27.8%	18.9%	17.4%	19.5%	52.1%	51.7%	52.5%	48.3%	14.6%	21.8%	24.5%	26.2%	6.3%	7.5%	7.5%	6.4%
Regions:																
North	37.8%	33.6%	28.6%	23.5%	40.0%	44.7%	46.5%	48.9%	17.8%	19.3%	20.7%	23.3%	5.6%	6.4%	6.8%	6.9%
Central	35.5%	28.7%	25.5%	19.9%	40.6%	45.8%	47.7%	49.5%	18.4%	21.6%	22.0%	25.6%	5.8%	6.7%	6.8%	7.6%
South	31.9%	27.5%	22.5%	20.2%	43.5%	49.0%	53.5%	52.2%	19.3%	20.6%	22.2%	22.8%	6.4%	6.1%	6.8%	6.9%

Teachers are supported with technology problems mostly by:

- ◆ Technicians
- ◆ Troubleshooters
- ◆ Help Desks

GOAL

Students, teachers and administrators will have access to educational technology in all learning environments, including classrooms, schools, and other educational settings such as community centers.

Photo courtesy of Millville School District





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To view the survey questions and a
complete report of the survey results,
check the Department of Education web
site at:
www.state.nj.us/njded/techno/survey

PROGRAMS FOR PROGRESS NEW JERSEY'S EDUCATIONAL TECHNOLOGY INITIATIVES:

www.state.nj.us/njded/techno/toc.htm

Distance Learning Network Aid 1997 - 2002
Educational Technology Training Centers (ETTC) 1997 - present
Local Technology Planning 1997 - present
Verizon's Access New Jersey 1997 - 2001
State Operated School Districts - Technology Model Schools 1998 - 2000
Technology Literacy Challenge Fund – Round I, II, III 1998 - 2000
Universal Service Fund or E-Rate 1998 - present
Assistive Technology for Students with Disabilities Training Project 1999 - present
County Coordinated Services 1999 - 2001
Access—Collaboration—Equity (ACE) Centers 2000 - 2002
Educational Technology and Whole School Reform Program 2000 - 2001
Pairing and Sharing Instructional Resources via Teleconferencing – Round I, II 2000 - 2002
NJ Educational Leadership Institutes for Technology in Education (NJ ELITE) 2001 - 2003
Technology Fellowship: Mentoring & Modeling 2001 - 2002
No Child Left Behind: Enhancing Education Through Technology 2002-2007